wherein a recirculation system comprising a withdrawal system for waste water and a supply line for waste water for flow delivery into the central flow channel are provided.

### 30. The hybrid reactor of claim 29,

wherein the withdrawal system comprises an intermediate space between two plate-like elements as well as a conduit starting in said intermediate space.

#### 31. The hybrid reactor of claim 29,

wherein the discharge system is positioned a distance above the withdrawal system of the recirculation system.

#### 32. The hybrid reactor of claim 24,

wherein the separator system comprises a partition provided in spaced apart manner above the upper end of the central flow channel and covering a large part of the reactor cross-sectional area while leaving free an outer annular area.

#### 33. The hybrid reactor of claim 32,

wherein the partition has portions in which it does not extend horizontally and forms a gas collection space in a highest portion.

## 34. The hybrid reactor of claim 33,

wherein, from the highest portion, the partition extends - roughly speaking - outwardly in downwardly inclined manner and inwardly in downwardly inclined manner.

#### 35. The hybrid reactor of claim 32,

wherein a withdrawal system of the recirculation system is positioned at the upper side of the partition.

#### 36. The hybrid reactor of claim 24,

# IAP12 Rec'd PCT/PTO 28 APR 2006

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U.S. APPLICATION NO. (if known, see 8 CFR 1.5)  10/5/8844  INTERNATIONAL APPLICATION NO. PCT/EP2004/052803					HAM 830020/USw	
The following fees have been submitted					CALCULATIONS	PTO USE ONLY
21. X Basic national fee\$300				\$300	\$300.°°	
22. Examination fee  If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4)					\$200.°°	
23. Search fee Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority					\$500,°° \$1000.°°	
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CLAIMS	NUMB	ER FILED	NUMBER EXTRA	RATE	\$	
Total claims	20	- 20 =	0	x \$50	\$	
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Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.						
SUBTOTAL =					\$	
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- •Transmittal Letter to the United States DO/EO/US concerning a submission under 35 USC 371 (2 pages)
- Declaration for Patent Application (2 copies, 3 pages each)
- Application Data Sheet
- Information Disclosure Statement + 6 references
- · Assignment and Recordation Cover Sheet (2 copies, 2 pages each)
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